DOCUMENT RESUME

ED 093 083 EA 006 282

AUTHOR David, Austin
TITLE In House Financial Systems for Education.
PUB DATE 8 May 74
NOTE 27p.; Paper presented at Association for Educational Data Systems Annual Convention (12th, New York, New York, May 7-10, 1974)

EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS Computer Oriented Programs; Data Processing; *Educational Finance; Financial Services; *Management Systems; *Parochial Schools; Private Financial Support; Private Schools; Program Descriptions; *Recordkeeping; *School Accounting; School Support

ABSTRACT

This paper reviews a financial management system developed to process accounts payable, general ledger, and budgeting for a large private school system. Tuition billing procedures as well as fund raising applications are also discussed and outlined. Strategies of reporting and systems are developed on the basis of fund accounting procedures. All financial recordkeeping and management reporting is handled by a centralized internally developed system designed to process a school system with a population of some 165,000 students. (Author)

ARCHDIOCESE OF NEW YORK
THE DATA SYSTEM CENTER

(914) 968-2303

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

BEST COPY AVAILABLE

ED 093083

EA 006 282

IN HOUSE FINANCIAL SYSTEMS FOR EDUCATION

Brother Austin David, FSC
Director
Data Systems Center
Archdiocese of New York

8 May '74

Presentation at Association for Educational Data Systems (AEDS) Convention held May 7-10, 1974.

SEMINARY AVENUE, YONKERS, NEW YORK 10704

BEST COPY AVAILABLE

BACKGROUND -

The Archdiocese of New York is a geographic entity of the Roman Catholic Church in the United States. It encompasses three boroughs of New York City and the seven proximate counties located to the north and northwest of New York City. As a Church unit located in a highly urban area, this private, non-profit organization operates many social services organizations caring for people of all ages from birth to old age. There are child caring agencies, hospitals, clinics, counselling services, rest homes and homes for the aged. In the area of education, the school system services some 120,372 students in 303 elementary schools, with 44,216 students in 82 high schools and some 17,788 students in 18 universities and colleges. The administration of such large and varied enterprises can be a most difficult undertaking especially in a dynamic and highly urban environment such as metropolitan New York.

For the sake of simplicity and brevity, this paper will deal with the automated systems developed to handle financial administration as it pertains to the educational system. As we move through the various systems, we will delineate the various structures pertinent to Church organization which will help the reader to understand the why these systems have been developed and how they interface with the administrative structures of the Archdiocese. Bear in mind that we are discussing one arm of an organization which has some 10,000 priests and religious along with 22,000 lay employees servicing the spiritual and material needs of the people in the metropolitan New York area.

DATA PROCESSING CENTER

The data processing center of the Archdiocese is one of the central administrative offices which provides services on an archdiocesan basis to all organizations affiliated with the Church. It functions much as a service bureau specializing in church related projects. A 98K UNIVAC 9400 with 4-8414 disc drives, 4-12C tape drives, 2-1100 line per minute printers, a 2703 optical document reader, a card punch and a card reader constitutes the hardware available at the computer center. There are 23 people on staff handling data preparation, data control, operations, programming, systems and administration. Several of the organizations using the data center are responsible for data preparation at the local level. This prepared data is sent to the computer center either via messenger or from remote terminals using telephone lines. Religious Sisters in cloistered monasteries also assist in the keypunch/verification phase of data preparation, and are not included in the on-site staff of twenty-three.

TUITION BILLING -

With the pressure created by ever increasing costs and declining enrollments, the schools can no longer exist on the income from the free will offerings of the faithful. Today, we must charge tuition and provide a system for maintaining records and providing timely reminders to parents with this system requiring a minimum of clerical help. Some twenty-five schools, both elementary and secondary are using the tuition system for financial record-keeping and reminders to parents issued on a regular basis monthly, bi-monthly or quarterly as the school wishes. An optically readable document is prepared for each student account and becomes the turnaround document to be returned with payment. When payment is received both checks and optical documents are endorsed with numeric controls to allow for tracing checks issued in payment which are not covered by adequate funds. This must be done since the name on the check often does not correspond with the name of the student. Once the clerical handling has been completed, both checks and forms are batched so that the bank deposit slip will become the batch control for the optical documents.

These documents are then processed at the computer center and batch reports generated. Records are updated and maintained with necessary financial adjustments, address changes, etc. entering the system through appropriate coding of either the optical document or through special forms. On the subsequent

mailing, a statement of account as well as the current bill is printed and sent to the parent. On a regular basis, the aged trial balance, arrears listing and student master are generated. The deleted students listing and school summary totals are also provided for use by administration. Figure 1, depicts the basic flow in the system and contains a sample of the optical document employed.

GENERAL LEDGER -

Today, the area of budgeting and budget control has become the "raison d'entre" of the financial administrative departments of every large organization. Working in conjuction with the Education Finance Office, the Data Center processed payables, check writing, check reconciliation, vendor analysis and general ledger. There are some 33 central education offices and 13 high schools under archdiocesan control which use a central fund for payment of vendors. Some 25,000 vendor checks are issued annually and the vendor file contains about 5,000 records. Invoices of vendors are received at the local operating organization whether high school or office, and an approval of payment form is filled out identifying the payee, the accounts to be debited, the amounts, invoice number and date. These are then sent to the central finance office where coding is reviewed and vendor codes and addresses, together with batch control numbers and totals are assigned. A duplicate of the approval of payment is forwarded to data processing in batches. Once the information is keypunched and verified, then a batch report is generated in control number order. This is the order in which the original source documents were completed and stored. Operations support checks for errors in batches, such as an attempt to use an unbudgetted account, or a chart of account item not valid for that particular facility. Each batch must be in agreement before checks are issued for that

batch and the facility and vendor files are updated. The check itself is a punched card and therefore becomes the turnaround document that is the input to check reconciliation. This segment of the system reports on the status of each check, e.g., cleared, outstanding, void and provides a monthly breakdown for the fiscal year indicating checks issued, cleared and outstanding along with the respective corresponding amount.

A vendor analysis report carries the year to date activity of each facility against each vendor for purposes of negotiating with each vendor. Another program provides an analysis of each function code or object code in the chart of accounts. The function code designated "who" spend the funds while the object code designates the "what" for which it was spent. The analysis of the function code and/or the object code provides a means for studying tends across not only the school system but the entire archdiocesan structure.

Finally, this system generates the books of original entry for cash disbursements, cash receipts, payroll and journal vouchers. The monthly operating statement as well as the general ledger for each facility and organizational structure is produced.

Figure two, serves to illustrate in outline fashion the stream of reporting in the general ledger system.

PARISH REPORTING -

The use of the TUITION BILLING system and the GENERAL LEDGER system is mandated for all schools and offices under direct archdiocesan control. Several parish high schools also use this system of reporting. It is important to note that the archdiocese does not directly administer a parish. The parish unit is largely autonomous and functions quite independently, much as a company within a corporate conglomerate. The Cardinal appoints the personnel who will work within the parish, and these men must administer the plant and its operations during their appointed term. The parish will function as a profit or cost center much as a company under the umbrella of a "holding company".

Annual budgets and actuals are submitted to the Central Administrative Offices for each parish and parish school. Figure 3 is a sample of the school data collection report with a three year plant history for purposes of comparing budgets vs. actuals. From such data, reports can be produced which review per capita income for each facility and compare this to county and archdiocesan norms. This report can also be run to compare using public school districts as the norm. Figure 4 is a sample of a portion of such a report.

Several other ancillary reports are generated for analysis of receipts and expenditures, interparish grants and aid, parish assessment, balance sheet reports and so on. These reports

are run for a budget period or an actual depending on the nature of the analysis being pursued. It should be pointed out here that all data processed are passed through appropriate edit routines which guarantee the integrity and soundness of the data base.

Naturally, in a modern society, the Church has to work with many organizations which were not until recently part of the spectrum of church activity. In 1969, when the lay teachers elected to become unionized, a whole series of programs had to be prepared to process teacher personnel data and simulate these data against parish financial records to determine the effect of proposed union pay scales on the operating condition of each parish and its fluid assets. With such data available, various analyses can be performed to determine age distributions, degree distribution, et.al, by county or school district. It suffices to say here, that the inter-relation of this information with financial and census information is a most valuable tool in the determination of policies and strategies for negotiation.

Figure 5 deposits a teacher data form, along with the general flow of reports produced within that system. Here again, we emphasize that data processing provides a tool to the local parishes as well as central administration for providing timely and accurate information for allocating available resources effectively and efficiently.

MISCELLANEOUS SERVICES

The basic packages cited thus far in this presentation deal with financial record keeping which is quite similar to that which is employed by a large conglomerate having varying degrees of control and influence over subsidiaries. The central offices of the archdiocese interface in different ways with each individual unit or facility. Autonomy and reliance on local talent and judgment is encouraged and has always been part and parcel of administrative traditions within the Church. However, the central administrative offices must be in close touch with local conditions on a timely basis in order to develop the plans and strategies necessary to administer ever shrinking resources bearing in mind that ever increasing demands are being made on the Church to provide services to its members and all who call for assistance when in need.

For this reason, there are other automated systems designed to assist in the administrative goals. Over 22,000 lay employee records are maintained to develop eligibility reports for pension, actuarial analyses and pension billing. An automated system monitors the retiree file and prepares actuarial reports for analysis. Employee monies are invested in a Tax Shelter Annuity Plan, and various records are maintained for some 2500 employees participating in the plan. Annual reports and surveys are generated for purposes of billing and informing members of the status of each account.

Billings and records are maintained for Blue Cross/Blue Shield, Major Medical and Insurance. Insurance records for properties and buildings are maintained centrally. The records for the priests' retirement plan, with issuance of retiree checks, are maintained and used for purposes of billing and actuarial studies. Social Security records are maintained for members of religious congregations together with a system for determining the various fiscal implications of religious joining Social Security together with the generation of needed reports such as 941's.

Each of the above entails a system requiring several programs, and the list could go on. But it suffices to say here, that the Church does not and cannot exist apart from the society in which it finds itself. It must use the tools of technology to develop the reports requested by federal, state and local government. The Church has an obligation to society to use its resources effectively since it has a substantial obligation to its lay employees to provide reasonable conditions of employment and security. The Church must also recognize that it is obligated to provide service to the community in which it is located.

The trick to do this, is that all of these things must be done on the free-will offerings of the faithful and those not of the faith sharing our humanitarian goals. It is impossible for the Church to increase taxes, for we do not tax. We cannot

increase assessed valuations on the faithful, for there are none. Through appeals and fund raising activities the funds necessary to keep the work moving forward must be obtained from those interested in supporting such church-related activities.

Here, again in fund raising, automated systems have been devised to develop mailing lists, keep track of pledges and provide reminders to donors, analyze various campaigns and giving programs in geographic areas as well as providing multitude of other analyses and simulations which are necessary for an intelligent pursuit of funds necessary for our educational system, our orphans, our aged, our sick and all men seeking aid from one of our institutions.

CONCLUSION

The Archdiocese of New York is one of the largest of the some 150 dioceses of the Roman Catholic Church in the United States. Its committment to education, social service and pastoral care is reflected in the fact that published audited reports for fiscal 1972-73 showed that operational expenditures for the Archdiocese were some $127,508,860.00. The solicitation of funds and collection of fees necessary to cover these expenses constitutes a substantial effort. The efficient use of funds provided to us by others is no small undertaking. Last year in our elementary schools, we expended some $390 per student, inclusive of debt service, to instruct a student. Obviously, we could do a far better job if we could spend more, but there is no more to spend. Considering that a child attends some 900 hours of class per annum, it is a sobering thought to realize that only some 43 cents per student per hour can be expended to form a human mind and human person. But this type of problem is just one of the very sad indicators of a basic human problem, that seems to have become rampant in an affluent society that relishes its overindulgence.

Looking beyond the brief sermon just presented, it is important to see that because of severely limited resources, we must be very cognizant of using each dollar optimally so as to obtain a maximum effect. Viewing as we have in the past

45 minutes the intricacy of the church structure here in New York City, it becomes apparent that only the availability of computing power could assist in the monitoring of resources and the development of procedures and reports which will reveal to our benefactors, that every reasonable human effort is being made to administer the substantial trust they have placed in us.

Thank you!

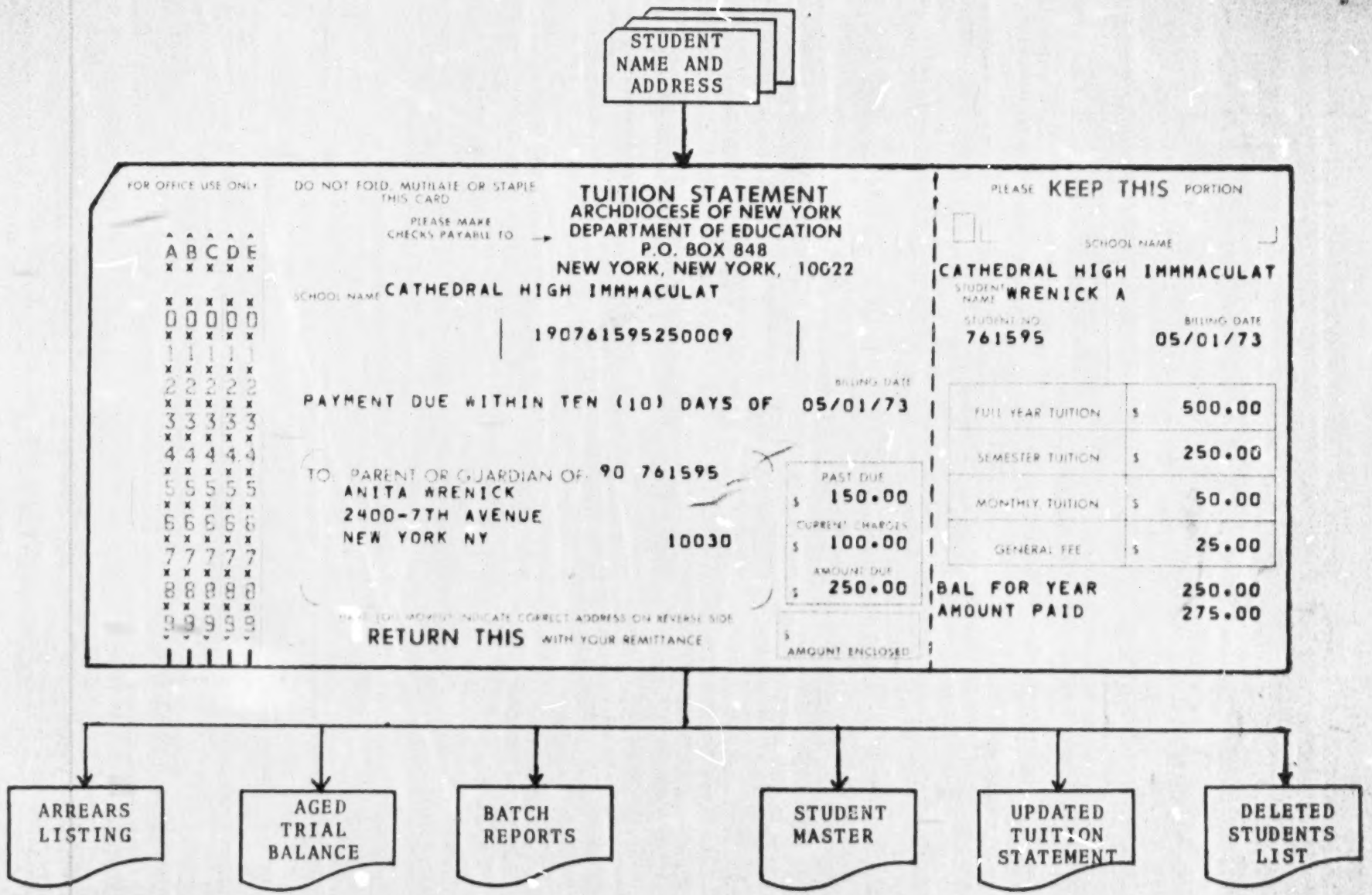
STUDENT NAME AND ADDRESS
FOR OFFICE USE ONLY
DO NOT FOLD, MUTILATE OR STAPLE THIS CARD
PLEASE MAKE CHECKS PAYABLE TO
TUITION STATEMENT
ARCHDIOCESE OF NEW YORK
DEPARTMENT OF EDUCATION
P.O. BOX 848
NEW YORK, NEW YORK, 10022
SCHOOL NAME CATHEDRAL HIGH IMMMACULAT
190761595250009
BILLING DATE
PAYMENT DUE WITHIN TEN (10) DAYS OF 05/01/73
TO: PARENT OR GUARDIAN OF 90 761595
ANITA WRENICK
2400-7TH AVENUE
NEW YORK NY 10030
PAST DUE $ 150.00
CURRENT CHARGES $ 100.00
AMOUNT DUE $ 250.00
IF ADDRESS INCORRECT, INDICATE CORRECT ADDRESS ON REVERSE SIDE
RETURN THIS WITH YOUR REMITTANCE
$ AMOUNT ENCLOSED
PLEASE KEEP THIS PORTION
SCHOOL NAME
CATHEDRAL HIGH IMMMACULAT
STUDENT NAME WRENICK A
STUDENT NO 761595
BILLING DATE 05/01/73
FULL YEAR TUITION $ 500.00
SEMESTER TUITION $ 250.00
MONTHLY TUITION $ 50.00
GENERAL FEE $ 25.00
BAL FOR YEAR 250.00
AMOUNT PAID 275.00
ARREARS LISTING
AGED TRIAL BALANCE
BATCH REPORTS
STUDENT MASTER
UPDATED TUITION STATEMENT
DELETED STUDENTS LIST

FIGURE 1

FIGURE 1

A sample tuition statement document illustrates the type of form used as a turnaround document in this system. The various reports generated by the system are indicated on the lower line.

FIGURE 2

This outline illustrates in a very general flow, the various phases of processing in the General Ledger System. It is assumed that the reader understands various edit reports are generated and operations control perform checks at various points within the procedures to validate and update data.

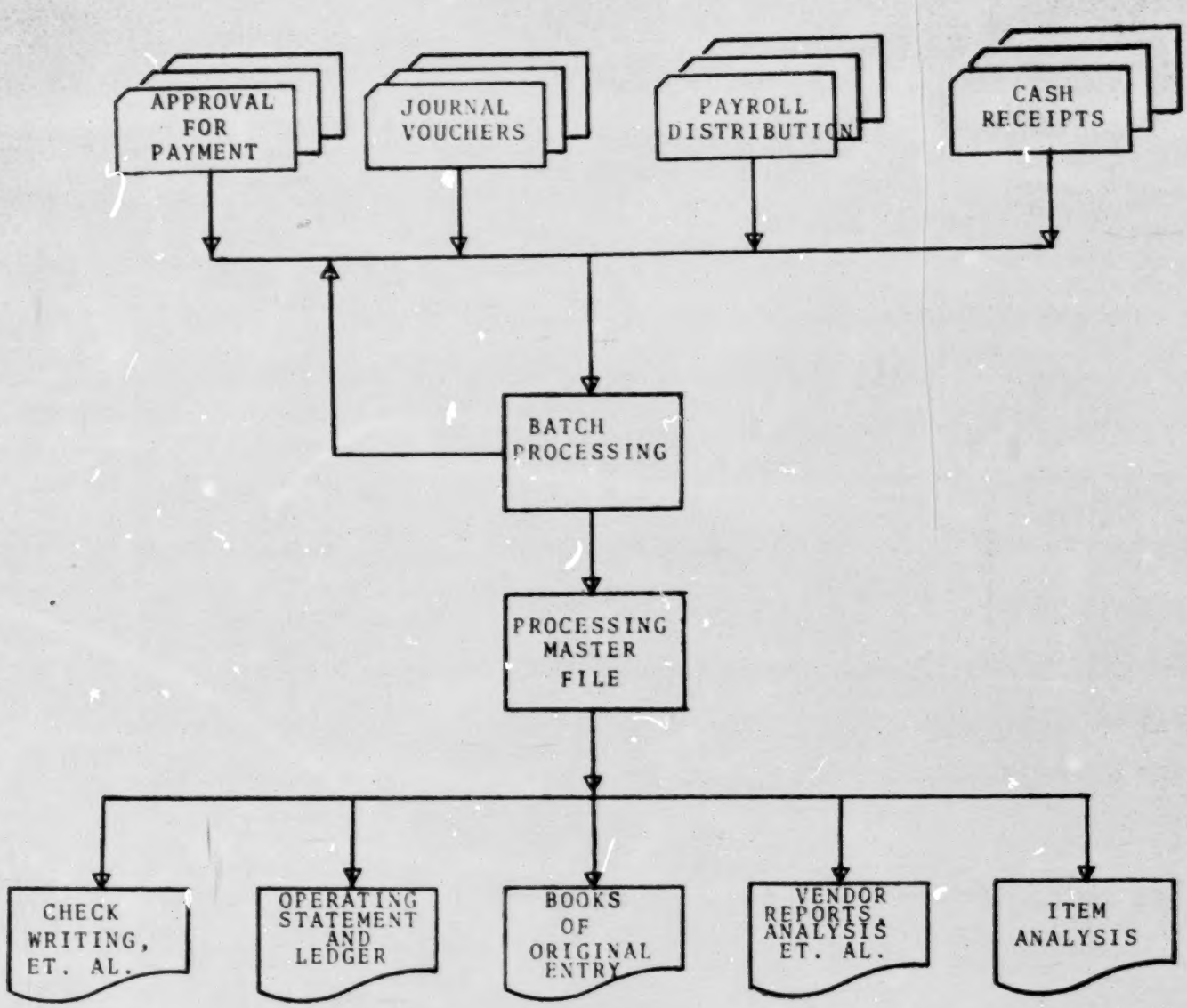
APPROVAL FOR PAYMENT
JOURNAL VOUCHERS
PAYROLL DISTRIBUTION
CASH RECEIPTS
BATCH PROCESSING
PROCESSING MASTER FILE
CHECK WRITING, ET. AL.
OPERATING STATEMENT AND LEDGER
BOOKS OF ORIGINAL ENTRY
VENDOR REPORTS, ANALYSIS ET. AL.
ITEM ANALYSIS

FIGURE 2

SCHOOL DATA COLLECTION REPORT 01 DATE PROCESSED

SCHOOL 80200 NAME [redacted] LOCATION [redacted] BRONX NY 10472

ACCT #	DESCRIPTION	ACTUAL 1971-72	BUDGET 1971-72	ACTUAL 1972-73	BUDGET 1972-73	BUDGET 1973-74	ACCT #
531	SALARIES	17,258.00	16,900.00	.00	17,500.00	18,000.00	531
532	SUPPLIES	2,283.00	2,000.00	.00	2,200.00	3,600.00	532
533	HEATING	2,952.00	4,000.00	.00	4,500.00	5,000.00	533
534	UTILITIES	3,075.00	4,000.00	.00	4,600.00	5,000.00	534
535	REPAIRS	1,371.00	6,000.00	.00	18,410.00	10,000.00	535
538	CONT SERV EX-REPAIR	660.00	120.00	.00	.00	300.00	538
539	MISCELLANEOUS	89.00	.00	.00	.00	100.00	539
TOTAL	OPERATION/MAINTENANCE	27,688.00	33,020.00	.00	47,210.00	42,000.00	
541	SALARIES	723.00	.00	.00	1,200.00	.00	541
542	SUPPLIES	.00	.00	.00	.00	.00	542
543	UTILITIES	.00	.00	.00	.00	.00	543
544	FOOD AND BEVERAGES	.00	.00	.00	23,200.00	.00	544
546	CONTRACT SERVICES	.00	.00	.00	120.00	.00	546
549	MISCELLANEOUS	.00	.00	.00	.00	1,200.00	549
TOTAL	CAFETERIA	723.00	.00	.00	24,520.00	1,200.00	
601	STUDENT ACTIVITIES	2,240.00	2,000.00	.00	1,600.00	1,500.00	601
602	SOCIAL SECURITY TAX	9,551.00	6,000.00	.00	11,653.00	10,000.00	602
603	PENSION COSTS	3,111.00	4,000.00	.00	4,000.00	3,000.00	603
604	INSURANCE	2,766.00	3,500.00	.00	1,300.00	1,500.00	604
604.1	HOSPITALIZATION-LAY	2,469.00	.00	.00	2,200.00	3,000.00	604.1
604.2	DISABILITY	.00	.00	.00	.00	.00	604.2
604.3	UNEMP.INS + COMP.	.00	.00	.00	95.00	.00	604.3
608	REPLACEMENTS-EQUIP	7,306.00	.00	.00	.00	.00	608
609	MISCELLANEOUS	31,509.00	.00	.00	.00	300.00	609
610	ASSESSMENT	.00	.00	.00	.00	700.00	610
TOTAL	GENERAL	58,962.00	15,500.00	.00	20,848.00	20,000.00	
611	SALARIES(HOUSEHOLD)	.00	.00	.00	.00	.00	611
612	REL RETIREMENT	.00	.00	.00	2,908.00	2,300.00	612
613	HOSPITALIZATION	373.00	.00	.00	1,200.00	1,200.00	613
614	INSURANCE	.00	.00	.00	.00	.00	614
615	REPAIRS	1,300.00	.00	.00	1,250.00	1,000.00	615
616	UTILITIES	948.00	.00	.00	.00	1,500.00	616
617	TELEPHONE	.00	.00	.00	.00	.00	617
619	MISCELLANEOUS	1,618.00	3,000.00	.00	.00	1,000.00	619
TOTAL	FACULTY RES.	4,239.00	3,000.00	.00	5,358.00	7,000.00	
SUB-TOTAL	EXPENSES	309,619.00	241,620.00	.00	363,856.00	320,720.00	
650	CAP EXP-EQUIP PLANT	.00	.00	.00	2,650.00	3,000.00	650
650.1	DEBT SERV-PRINCIPAL	.00	.00	.00	.00	.00	650.1
650.2	DEBT SERV-INTEREST	2,097.00	.00	.00	.00	.00	650.2
TOTAL	EXPENSES	306,711.00	241,620.00	.00	366,506.00	323,720.00	

FIGURE 3

FIGURE 3

Figure 3 is a sample of the data collection which goes to every parish and every elementary school. On a regular basis the data are collected for each fiscal period, and previously entered data are displayed for purposes of comparison.

ELEMENTARY SCHOOL PER-CAPITA REPORT

DATE 09/19/73 BUDGETED FOR SEPTEMBER 1,1973 THRU AUGUST 31 1974 PAGE 9

REPORT FOR 80200 [redacted] BRONX NY 10472

PARISH STUDENTS 650 OTHER STUDENTS 60 TOTAL STUDENTS 710

	ACCNO	DESCRIPTION		AMOUNT	SCHOOL PER-CAPITA	COUNTY PER-CAPITA	DIOCESAN PER-CAPITA
		****RECEIPTS****					
	401	TUITION-PARISH		92,000.00	141.53	166.62	139.30
	402	TUITION-OUTSIDE		12,000.00	200.00	182.34	200.47
	404	REGISTRATION FEES		400.00	.56	.97	1.27
	405	SPECIAL SUBJECT FEE		1,000.00	1.40	2.42	1.53
	406	ACTIVITY FEES		2,500.00	3.52	2.66	2.30
	407	SALE OF BOOKS		22,000.00	30.98	12.15	11.15
	408	RENTAL OF BOOKS		150.00	.21	2.60	3.62
	409	SALES OF SUPPLIES		2,000.00	2.81	3.31	3.60
	410	CAFETERIA SALES		.00	.00	2.46	3.52
	411	CAFETERIA		.00	.00	.63	.93
	419	MISC RECEIPTS		20,000.00	28.16	10.50	13.06
	TOTAL REGULAR RECEIPTS			152,050.00	214.15	205.72	184.91
	403	PARISH SUPPORT		171,670.00	241.78	149.48	203.80
	420	NYS MNDTD SERV PAY		.00	.00	.00	.00
	ADJUSTED TOTAL RECEIPTS			323,720.00	455.94	355.21	388.72
		****EXPENSES****					
ADMINISTRATION	501.1	SALARIES PROF-REL	1.0	13,960.00	19.66	6.09	8.00
	501.2	SALARIES PROF LAY		.00	.00	2.03	2.81
	501.3	SALARIES NONPRO REL		.00	.00	.62	.52
	501.4	SALARIES NONPRO LAY	2.0	10,000.00	14.08	8.51	8.88
	502	SUPPLIES		1,700.00	2.39	1.34	1.49
	507	TELEPHONE		1,500.00	2.11	1.12	1.51
	509	MISC INCLUDE D P		4,200.00	5.91	1.70	1.62
	TOTAL ADMINISTRATION			31,360.00	44.16	21.44	24.86

FIGURE 4

FIGURE 4

The above report serves to illustrate the chart of account per capita analysis which is developed for each line item in each school. Per capita receipts and expenses for the local county and archdiocese are also displayed for purposes of comparison. The county column can be replaced by the local public school district should that figure be useful.

TEACHER STATISTICAL DATA FORM

INSTRUCTIONS FOR TEACHER STATISTICAL DATA FORM:

PLEASE FILL IN ALL INFORMATION ON THIS CARD. IF THE PREPRINTED INFORMATION STORED IN YOUR FILE IS INCORRECT OR NOT UP TO DATE, CROSS OUT THIS INFORMATION WITH A SINGLE LINE AND LETTER THE CORRECT INFORMATION ABOVE THAT WHICH HAS BEEN CROSSED OUT. ALL ITEMS MUST BE COMPLETED.

201 000115 R

[redacted] [redacted] SR

BS EDUCATION 22 010 47

09/67

SPOUSE COVERAGE
BLUE CROSS/SHIELD Y N
MAJ. MEDICAL Y N

SEX M F

08

STATE CERTIFICATION YES Y NO

BIRTH DATE 05/19/05

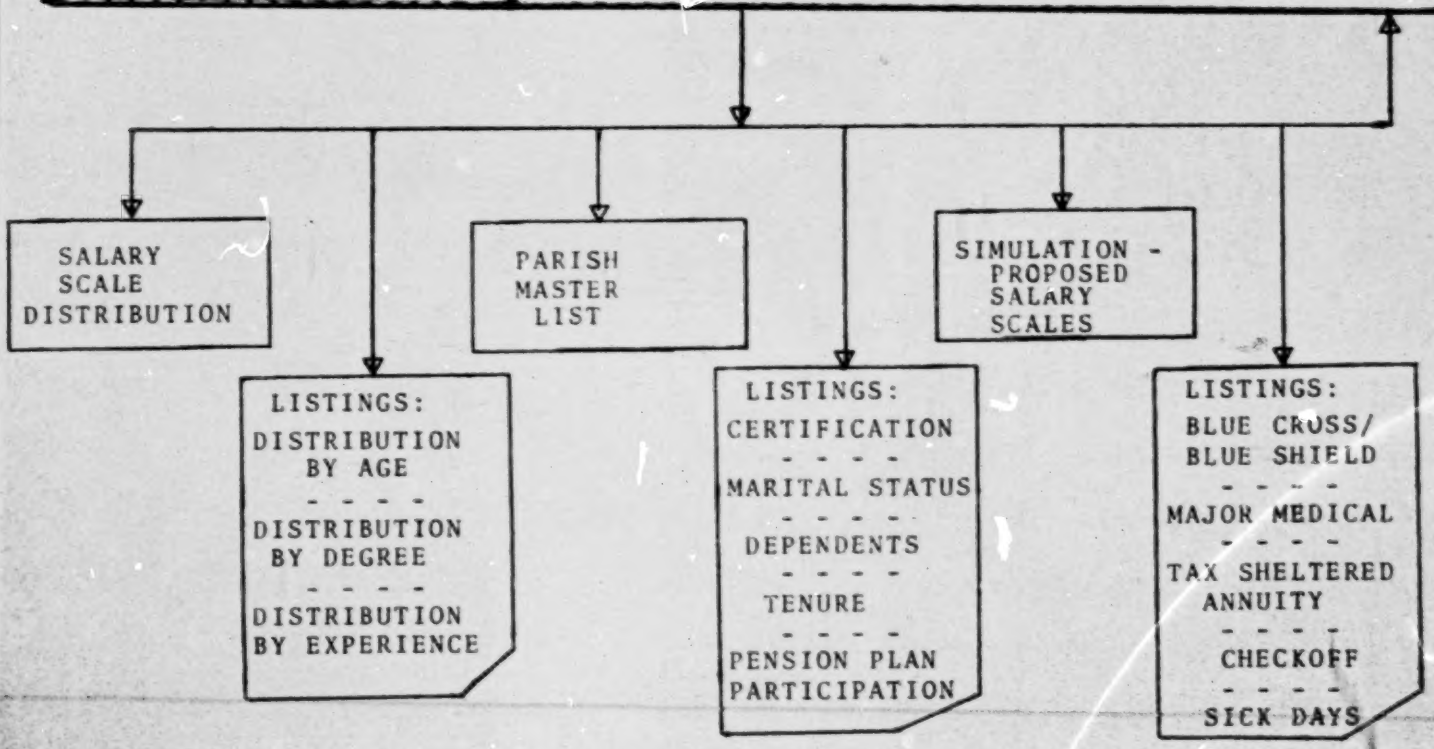

FIGURE 5

FIGURE 5

Figure 5 outlines the general flow of information within the Teacher Personnel segment of the Parish System. The basic reports developed by the system are listed to provide a sampling of the types of information which can be developed from the data base.